

U.S. Patent Application Serial No. **09/787,119**  
Amendment filed September 21, 2006  
Reply to OA dated March 22, 2006

**REMARKS:**

Claims 1-19 are currently pending. Claims 1-5 and 12-16 are currently being considered, of which claim 12 has been amended herein. Claims 6-11 and 17-19 have been withdrawn from consideration.

Applicants and Applicants' attorney thank Examiner Rickman for the interview courteously granted April 14, 2006. The special attention the Examiner paid to the instant application is noted with appreciation. Items discussed during the interview include: claims 4, 5, 15, and 16; and the Office Action mailed March 22, 2006. The interview was initiated because the Office Action appears to possibly include a rejection relating to a **Suzuki** reference (see Office Action, page 2, paragraph 3). During the interview, the Examiner confirmed that the rejection of claims 4, 5, 15, and 16 under 35 USC 103(a) as obvious over **Suzuki** in view of **Kubota** has been withdrawn.

The Examiner has rejected claims 1-5 and 12-16 under 35 USC 103(a) as obvious over USP 4,132,350 (**Kubota**) in view of USP 4,899,037 (**Marechal**) or USP 4,852,911 (**Hoppe**) in view of **Marechal**.

Applicants respectfully traverse this rejection, for the following reasons.

The subject application discloses a transferable magnetic tape in which a printed layer, a magnetic recording layer, and an adhesive layer are layered in sequence upon a backing film with said printed layer closest to said backing film, wherein said printed layer comprises a pattern printed region (1) and a filling layer region (2) which is provided outside said pattern printed region (1), and has a different color from the color of said pattern printed region (1); and a thickness of said printed layer is uniform; and in said transferable magnetic tape a coercivity of magnetic powder contained in said magnetic recording layer is 20 to 320 kA/m.

By employing the aforementioned transferable magnetic tape in which the printed layer is layered, the printed layer covering over the aforementioned magnetic recording layer and providing design properties can be layered; the aforementioned printed layer effectively conceals the magnetic recording layer; and the printed layer layered on the magnetic recording layer in the transferring step does not cause the magnetic output variation.

In addition, the aforementioned transferable magnetic tape is formed by forming the pattern printed region (1) on a backing film; subsequently forming the filling layer region (2) in a non-printed region which is not the pattern printed region (1); making the printed layer formed by the aforementioned regions (1) and (2) have a uniform thickness; and subsequently, layering a magnetic recording layer and an adhesive layer in sequence thereon. The magnetic recording layer is printed on the uniform plain surface of the printed layer. For this reason, the interface of the

U.S. Patent Application Serial No. **09/787,119**  
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magnetic recording layer with the printed layer is smooth and the thickness is also uniform. Therefore, neither interface modification nor thickness variation occurs. In addition, by transfer onto the substrate via the transferring step, the magnetic recording layer having a uniform shape and a uniform thickness, and the printed layer having a uniform thickness on the aforementioned magnetic recording layer can be formed.

As described above, the transferable magnetic tape according to the disclosure of the subject application is employed in performing the transferring step in which the magnetic recording layer, the printing layer adjacent to the magnetic recording layer, and the adhesive layer are simultaneously layered, and only after the aforementioned transferring step, the effects of the present invention can be exhibited. In addition, in the preparation of the transferable magnetic tape according to the disclosure of the subject application, when the magnetic recording layer is formed on the printed layer, it is very important whether or not the thickness of the aforementioned printed layer is uniform, since the uniformity of the printed layer effects the uniform formation of the magnetic recording layer.

The Examiner has rejected claims 1-5 and 12-16 as being obvious over **Kubota** in view of **Marechal** or **Hoppe** in view of **Marechal**.

**Kubota, Marechal and Hoppe** shall be addressed when taken individually, and shall also be addressed when taken in combination.

When the aforementioned citations are considered in view of the characteristics disclosed by the subject application described above, the aforementioned citations fail to disclose a tape having the constitution corresponding to that of the transferable magnetic tape as disclosed by the subject application. In addition, it is clear that the features disclosed by the subject application would not have been obvious over these citations for a person skilled in the art, even if these citations had been combined.

For example, **Kubota** fails to disclose that a layer corresponding to the filling layer of the present invention is formed in a non-printed region, and the magnetic output variation can be eliminated when the magnetic layer and the printed layer are simultaneously formed by the transferring step. In addition, **Kubota** also fails to disclose the importance of thickness uniformity in the printed layer in the preparation of the transferable magnetic tape. Fig. 5 of **Kubota** merely describes a formation method without using a transferring step in which necessary layers are successively formed on a card substrate. Here, a pattern portion 5a is provided on a color layer 4, and a non-pattern portion 5b may also be provided in the remaining area. However, it is also described that the pattern layer may be formed only by the pattern portion 5a without using the

pattern portion 5b. In conclusion, in **Kubota**, the formation of the non-pattern portion 5b and uniformity of the thickness of the printed layer are not recognized as essential matters (see from column 3, line 66, to column 4, line 16, of **Kubota**). In other words, when the necessary layers are successively layered on the card substrate without using the transferring step, as described in **Kubota**, the pattern layer is merely layered on the magnetic recording layer in a separate manner. For this reason, the shape of the magnetic recording layer is not affected thereby. In addition, a smooth surface of the card can be finally formed by a protective layer to be layered on the pattern layer, and for this reason, this does not effect the magnetic output variation.

In contrast, when the magnetic recording layer and the printing layer are simultaneously provided in the transferring step employing the transferable magnetic tape, unless the interface between the printing layer and the magnetic recording layer is made smooth by making the thickness of the printing layer provided between the magnetic recording layer and the backing film uniform, the shape of the magnetic recording layer applied and formed on the printing layer, and in particular, the thickness is not uniform. In addition, if the thickness of the printing layer is not uniform, the thickness of the printing layer to be layered on the magnetic recording layer after transferring also varies, and thereby a non-preferable magnetic output variation may occur.

In **Kubota**, the preparation of a magnetic card via a transferring step, and a transferable magnetic tape employed therein are also described, but the printing layer of the aforementioned tape

fails to have a filling layer region (see Fig. 13 and Fig. 14 of **Kubota**). Therefore, **Kubota** fails to describe the characteristic, which the transferable magnetic tape disclosed by the subject application possesses, that the thickness of the printing layer is uniform. Consequently, **Kubota** fails to disclose the remarkable effects exhibited during the transferring step in accordance with the disclosure of the subject application.

**Marechal** discloses a magnetic information-recording element comprising a magnetic information track and a non-magnetic track adjacent to the magnetic information track, and also discloses a method for preparing the aforementioned tracks adjacent to each other, comprising a coating step, and a method for providing the aforementioned magnetic information-recording element on a support by a transferring step. However, a layer to be layered on the magnetic information track forming the magnetic information-recording element is only a masking layer, and the printed layer as described in the subject application is not provided. Therefore, in **Marechal**, there have been no problems with the magnetic output variation caused by irregularities of the printed layer formed on the magnetic information track, from the beginning. Consequently, **Marechal** is a citation which does not relate to the object of the disclosure of the subject application.

In addition, **Hoppe** discloses a magnetic card comprising a support layer structure, a magnetic layer, a masking layer covering the magnetic layer, a printed layer formed from two

different color inks having a uniform thickness, and a protective layer provided on the printed layer.

In addition, **Hoppe** also discloses a transferable magnetic tape comprising a magnetic layer for forming the aforementioned magnetic card via a transferring step, and a masking layer. However, the transferable magnetic tape of **Hoppe** fails to have a printed layer (see from column 5, line 56, to, column 6, line 3 of **Hoppe**). In **Hoppe**, the layers to be layered in the transferring step are only the magnetic layer and the masking layer, and **Hoppe** fails to disclose that the magnetic layer and the printed layer are simultaneously layered in the transferring step, as in the transferable magnetic tape of the present invention. The printed layer is provided on the masking layer in another step. Therefore, the problems to be solved by the disclosure of the subject application which occur during forming the magnetic layer and the printed layer on the card substrate at the same time in the transferring step fundamentally do not occur in **Hoppe**. In addition, in **Hoppe**, the printed layer is formed on the masking layer in another step, but **Hoppe** fails to disclose that the thickness of the printed layer should be uniform, and in order to perform design formation and avoid overlapping in the printed layer, formation of a gap is even carried out (see column 5, from line 31 to line 39 of **Hoppe**). This may be carried out since the surface of the card can be made smooth by the protective layer to be layered on the printed layer, and it is believed that **Hoppe** does not see irregularities of the printed layer as a problem.

In the case of carrying out the formation of the printed layer in another step after the formation of the magnetic recording layer, as disclosed in **Hoppe**, the shape or thickness of the magnetic recording layer is not affected by the printed layer. Therefore, if the distance from the surface of the card substrate to the magnetic recording layer is uniform by virtue of the protective layer forming the uniform card surface, the magnetic output variation does not occur.

As described above, **Hoppe** fails to describe the transferable magnetic tape for use in simultaneously transferring the magnetic recording layer and the printed layer as disclosed by the subject application.

As described above, **Kubota, Marechal, and Hoppe**, alone or in combination, fail to describe, teach, or suggest the structure of the transferable magnetic tape disclosed by the subject application. Therefore, based on these citations and the knowledge of one of ordinary skill in the art, it should not be possible for a person of ordinary skill in the art to easily conceive of the features disclosed by the subject application. The remarkable effects disclosed by the subject application, that the undesirable output variation is eliminated, could not have been conceived of by a person of ordinary skill in the art.

**Kubota, Marechal, and Hoppe**, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 1: "A transferable magnetic tape in which a printed layer,



a magnetic recording layer, and an adhesive layer are layered in sequence upon a backing film with said printed layer closest to said backing film, wherein said printed layer comprises: (1) a pattern printed region (1) and, (2) a filling layer region (2) outside said pattern printed region (1), and moreover (3) said pattern printed region (1) and said filling layer region (2) are different in color, (4) a thickness of said printed layer is uniform," in combination with the other claimed features.

Thus, Applicants respectfully submit that this rejection of claim 1 is improper and should be withdrawn.

**Kubota, Marechal, and Hoppe**, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 12: "A magnetic card in which a magnetic recording layer and a printed layer are formed in sequence on a card base material with said magnetic recording layer closer to said base material, wherein said printed layer comprises: (1) a pattern printed region (1) and, (2) a filling layer region (2) outside said pattern printed region (1), and moreover (3) said pattern printed region (1) and said filling layer region (2) are different in color, (4) a thickness of said printed layer is uniform," in combination with the other claimed features.

Thus, Applicants respectfully submit that this rejection of claim 12 is improper and should be withdrawn.

U.S. Patent Application Serial No. 09/787,119  
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In view of the above, Applicants submit that the rejection of claims 2-5 and 13-16 should be withdrawn by virtue of their dependency.

Claims 12 has been amended herein, in order to correct a typographical error.

In view of the aforementioned amendments and accompanying remarks, all claims currently being considered are in condition for examination.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No. **09/787,119**  
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In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due now or in the future with respect to this application, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Petition for Extension of Time